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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/565,554

01/23/2006

Keijitsu Tanaka

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2075

23373 7590 02/26/2009  
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EXAMINER

SHAHNAN SHAH, KHATOL S

ART UNIT

PAPER NUMBER

1645

MAIL DATE

DELIVERY MODE

02/26/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<i>Office Action Summary</i>	Application No.	Applicant(s)	
	10/565,554	TANAKA ET AL.	
	Examiner	Art Unit	
	Khatol S. Shahnan-Shah	1645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2008.
- 2a) ☒ This action is FINAL.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-9 and 11-18 is/are pending in the application.
- 4a) Of the above claim(s) 1,2 and 4-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9 and 11-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## RESPONSE TO AMENDMENT

1. The amendment and response filed 12/08/2008 have been entered into the record. Claims 3 and 10 have been cancelled. Claims 1, 4, 9 and 11 have been amended. Claims 1, 2, 4-9 and 11-18 are pending. Claims 9 and 11-18 are under examination. Claims 1, 2 and 4-8 are withdrawn from consideration as being drawn to non-elected amendments.

### *Rejection(s) Moot*

2. Rejection of claim 10 under 35 U.S.C. 103 (a) made in paragraph 6 of action mailed 8/07/2008 is moot in view of cancellation of said claim.

### *Rejection(s) Withdrawn*

3. Rejection of claims 9 and 11-18 under 35 U.S.C. 103 (a) made in paragraph 6 of action mailed 8/07/2008 is withdrawn in view of applicants' amendments filed 12/08/2008.

### *New Rejection(s) Based on Amendment*

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9 and 11-18 are rejected under 35 U.S.C. 103(a) as being obvious over Clausen et al. (US 5, 563040) in view of Hirano et al. (Journal of Wood Science, vol,

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46, 2000) Prior art of record applicants' 1449. and further in view of Kawai et al. US 3, 677,899.

Claims 9 and 11-16 are drawn to an agent used for diagnosing wood decay which comprises an antibody obtained by sensitizing an animal with an antigen which is a protein having a molecular weight of 1000-100,000 obtained by culturing a wood destroying fungi, claims 17-18 are drawn to a dot blot kit for diagnosing decay in wood.

Clausen et al. teach an agent used for diagnosing wood decay which comprises an antibody obtained by sensitizing an animal with an antigen which a protein is obtained by culturing a wood destroying fungus (see abstract and claims). Clausen et al. teach brown rot fungus *Postia placenta* from family Basidiomycetes (see column 3), sensitizing an animal with an antigen and production of monoclonal and polyclonal antibodies (see example 1 and claims). Clausen et al. teach other fungi *Gloeophyllum trabeum*, *Coniophora puteana* and *Serpula* species (see column 7). Clausen et al. teach limitation of claims 17-18 a diagnostic kit having a polyester cloth device and a capture zone for the substrate (see claims 12-14). Clausen et al. do not teach specifically a molecular weight of 1000-100,000 or *Fomitopsis palustris*. These deficiencies are overcome by the teachings of Hirano et al.

Hirano et al. teach a fraction containing low molecular weight purified protein from cultures of brown rot fungus *Tyromyces palustris* (i.e. *Fomitopsis palustris*, new name) see abstract. Polyclonal antibodies raised to the fraction were used for immunogold labeling of spruce (see page 45). Hirano et al. teach culture conditions; preparation of protein fraction, preparation of polyclonal antibodies; immunoblotting and ELISA (see pages 46-47). Hirano et al. do not teach specifically cellobiose as the main carbon source. This deficiency is overcome by the teachings of US 3, 677,899.

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Kawai et al. US 3, 677,899 teach cellobiose as the main carbon source for culturing wood decay fungi including *Fomitopsis* species (see column 1 and 2.)

Therefore, it would have been obvious to one of ordinary skill in the art to use the *protein* as taught by Hirano et al. in the assay of Clausen et al. and use the liquid medium taught by Kawai et al. to provide the claimed invention, since as taught in Clausen et al. numerous modification and embodiments devised by those skilled in art other the ones specifically described above, may be employed to detect the presence of the suspected antigens. For instance antibodies for other components or other groups of fungi can alternatively be used in this invention (see column 5). As to specific temperatures and molecular weights, using different temperatures and molecular weights would have been considered optimization of experimental parameters and would be obvious to one of ordinary skill in the art. As to the limitation not reactive with other fungi it would be obvious to one ordinary skill in the art to provide antibodies specific to wood decay fungi.

#### *Status of Claims*

6. No claims are allowed.

#### *Conclusion*

7. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khatol Shahnan-Shah whose telephone number is 571-272-0863. The examiner can normally be reached on Monday-Friday 7:30 AM-5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert B. Mondesi can be reached on 571-272-0956.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

/Khatol S Shahnan-Shah/

Examiner, Art Unit 1645

February 22, 2009

/Robert B Mondesi/

Supervisory Patent Examiner, Art Unit 1645

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